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Examiner: Matthew Anderson
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IN THE CLAIMS

1. (currently amended) An apparatus used in production of semiconductor ingots using the Czochralski method comprising:

a bowl-shaped crucible suitable for containing a melt, the crucible having a solid wall;

a bowl-shaped susceptor at least partially disposed around and supporting the crucible, wherein the susceptor has a plurality of ventilation holes and wherein a gap exists between the wall of the crucible and the wall of the susceptor before heat is supplied; and

a process gas introduced above the crucible flowing in a downward direction, at least a portion of which enters the gap between the wall of the crucible and the wall of the susceptor and exits through the ventilation holes.

2. (original) The apparatus according to claim 1 wherein the susceptor is a graphite susceptor.

3. (original) The apparatus according to claim 1, wherein the susceptor contains a protective coating.

4. (original) The apparatus according to claim 3, wherein the protective coating is a silicon carbide coating.

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5. (original) The apparatus according to claim 1, wherein at least a portion of the ventilation holes are spaced vertically along at least a portion of the susceptor.